

July 21, 2017

## e-vergent.com, LLC Comment RE FCC Proceeding 12-354 Opposing CTIA & T-Mobile Petitions to Amend the Rules for the CBRS Band

E-vergent is a fixed wireless Internet Service Provider serving approximately 3000 rural customers between Milwaukee and Chicago. Even with our relatively close proximity to major metropolitan areas there are significant numbers of people who have no wired choice for their home or business Internet service.

Based on the costs, I believe fixed wireless is the best way to accomplish the goal of providing broadband Internet to sparsely populated areas. We do a lot with 5GHz but there are limits with 5GHz and two main issues the CBRS band will help us solve.

The number one reason we are not able to provide service to prospective customers is due to a lack of line of sight from the customer location to on of our towers. Many customers have trees around their home which means that a  $5\,\mathrm{GHz}$  link will not function for them. We have personally seen LTE in the 3.65 –  $3.7\,\mathrm{GHz}$  band perform exceptionally well through light foliage. This combination of spectrum and equipment is a very robust tool allowing us to deliver Internet service at speeds in excess of  $25\,\mathrm{Mbps}$  to customers who were previously only able to receive  $1\,\mathrm{Mbps}$  service using  $900\,\mathrm{MHz}$  spectrum where channel sizes are small and interference levels are high.

The other issue we face is quality of service. This breaks down into two components, capacity on the network and interference from other devices. Interference from other devices degrades network performance, which leads to increased operational costs on our end and an unpleasant user experience for the customer. We plan to bid on PALs to eliminate interference from other organizations and provide a great and consistent end user experience to our customers. The other side of the issue is capacity. Seemingly there is a never-ending increase in Internet bandwidth consumption and the additional spectrum will allow us to offer the fastest service levels possible while being able to have other organizations also use the band.

E-vergent opposes the recently filed rulemaking petitions filed by the CTIA and T-Mobile. The shorter-term licenses, census tract PAL areas, and spectrum specifically allocated for GAA use are important components to deploying services in this spectrum quickly and by many organizations, not a select few. The Partial Economic Areas are simply too large and make the deployment a non-starter for e-vergent.

E-vergent, and other WISPs are part of the macro solution to the Country's digital divide by providing micro solutions on a small town by small town basis. The PEA's are too large for many other potential users such as school districts, water utilities, local governments, and even private

enterprise much less service providers such as e-vergent. The previous framework the FCC created for the CBRS got it right. It allowed an even playing field for small and large alike. Participation by many diverse organizations, not a few large cellular providers, will allow this spectrum resource to thrive and set it up to be as widely deployed as WIFI.

In short, the CRBR band will allow e-vergent to deliver service to previously unserviceable locations, provide faster service keeping pace with consumer demand, and a better quality of service due to it's licensed nature. E-vergent looks forward to the SAS coming online and using the CBRS on the basis of the FCC's previously announced framework.

Thank you for your consideration,

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